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NATIONAL ACCOUNTS AND BALANCES: SYSTEM OF BALANCES OF
THE NATIONAL ECONOMY

Basic methodological provisions for the compilation of the
System of Statistical Balances of the National Economy:
a summary of main points

Note by the Secretary-General

The Secretary-General has the honour to transmit herewith the report prepared by the Council for Mutual Economic Assistance.

* E/CN.3/1985/1; see also E/CN.3/1985/21.

Annex

REPORT OF THE SECRETARIAT OF THE COUNCIL FOR MUTUAL ECONOMIC ASSISTANCE CONTAINING A SUMMARY OF THE MAIN POINTS IN THE DRAFT BASIC METHODOLOGICAL PROVISIONS FOR THE COMPILATION OF THE SYSTEM OF STATISTICAL BALANCES OF THE NATIONAL ECONOMY

INTRODUCTION

1. The purpose of this report is to acquaint the participants in the twenty-third session of the Statistical Commission with the draft basic methodological provisions for the compilation of the System of Statistical Balances of the National Economy, prepared by the Standing Commission on Co-operation in the Field of Statistics of the Council for Mutual Economic Assistance (CMEA).
2. The draft is a further development of the document entitled Basic Principles of the System of Balances of the National Economy. 1/
3. The draft is submitted for consideration by the Statistical Commission, for the purpose of its adoption to replace that earlier document.
4. The Basic Principles of the System of Balances of the National Economy were approved by the Statistical Commission in 1970. In the follow-up period, work was done by the CMEA member countries and by the CMEA Standing Commission on Co-operation in the Field of Statistics to further develop and improve the methodology of the system of statistical balances of the national economy. The results achieved in this area were submitted for consideration to the Working Group on National Accounts and Balances of the Conference of European Statisticians in 1982 and at the twenty-second session of the Statistical Commission in 1983.
5. As a result, a decision was taken on the expediency of preparing a draft of an updated version of the basic principles. Inspired by this decision, the CMEA Standing Commission in March 1984 prepared and approved the draft referred to in paragraph 1 above. The leading experts of central statistical offices of the CMEA member countries participated actively in the elaboration of the draft.
6. The System of Balances of the National Economy is a system of interrelated tables and indicators designed to present in a generalized form a concrete characterization of the process and results of social reproduction. The System makes it possible to provide information on the level achieved and the factors of economic development of a country, basic proportions, structure and development of production, consumption and capital formation, economic efficiency of social production, and also on the manpower, material and financial resources. The System serves the purposes of macro-economic analysis of the development of the national economy and is an important instrument of co-ordination and balance of the plans of economic and social progress.
7. The theoretical foundation of the compilation of the System of Balances of the National Economy is the Marxist-Leninist theory of laws of modern social production.

In the CMEA member countries, the System holds central place in the system of economic statistics. The concepts of the balance define the principles of taking into account the indicators being the subject of the study of the branch statistics in order to bring out synthetic indicators of the national economy, such as the global product, national income, etc.

8. The principles of economic analysis used in the System are applied not only to the planned economy but may also be used in examining the social reproduction in market economy countries, and in developing countries, in particular where main attention is attributed to the creation of material conditions of the life of society which are necessary for the accelerated development and the solution of social tasks.

I. GENERAL PRINCIPLES OF THE SYSTEM OF BALANCES OF THE NATIONAL ECONOMY

9. The process of reproduction in the System of Balances of the National Economy is considered in two aspects: as a process of production, distribution and consumption of material goods and as a process of production, distribution and disposition of income. All the multiplicity of forms of economic activity in the national economy may be reduced to two main spheres: the sphere of material production and the non-material sphere.

10. The productive character of labour is the criterion delineating the sphere of material production. The final result of the activity in the material sphere is material goods, including material services.

11. The non-material sphere embraces activities directed towards rendering non-material services in order to meet social, cultural and communal needs of individual members of the community and of the community as a whole. The input of social labour into this sphere, though of a socially beneficial nature, does not increase the total quantity of material goods at the disposition of the community. In the non-material sphere takes place the process of use and redistribution of material goods and incomes produced in the sphere of material production.

12. Material production is primary in comparison with the human activities creating non-material services. The rendering of non-material services depends on the production of material goods, since it would be impossible without the consumption of such goods. The wealthier a community is, the more material goods it produces, the greater is the share of those goods which it can make available for the rendering of non-material services.

13. The grouping of indicators of the System of Balances of the National Economy by type of activity (according to the branches of the national economy) and their division into two spheres is made on the basis of the classification of branches of the national economy of the CMEA member countries (see sect. III A below).

II. STRUCTURE OF THE BASIC METHODOLOGICAL PROVISIONS FOR THE
COMPILATION OF THE SYSTEM OF STATISTICAL BALANCES OF THE
NATIONAL ECONOMY

14. The basic methodological provisions for the compilation of the System of Statistical Balances of the National Economy consist of eight sections:

1. Basic concepts and definitions.
2. The balance of production, consumption and accumulation of the global product (material balance).
3. The balance of production, distribution, redistribution and final disposition of the global product and of the national income (financial balance).
4. Input-output table.
5. The manpower balance.
6. The indicators of national wealth and the balance of fixed capital.
7. The indicators of population incomes and consumption.
8. The balance of non-material services.

A. Basic concepts and definitions

15. This section of the draft gives extensive information on the subject-matter of the System of Balances of the National Economy, which is to provide information on:

- (a) The production and disposition of the global product and of the national income;
- (b) The relationships and proportions between basic economic categories;
- (c) The production, distribution, redistribution and final use of incomes;
- (d) The manpower resources of the community, their distribution among the branches of the national economy, and their use;
- (e) The size and the structure of fixed capital and other parts of the national wealth and their use in the national economy;
- (f) The level of incomes and of the total consumption of material goods and non-material services by the population;
- (g) The composition of production by social categories;
- (h) Public categories of non-material activity in the national economy.

16. The section also gives branch and social groups used in the national economy.
17. The classification according to two main spheres (material and non-material) and by branches of the national economy in the System is not based on individual organizational units (i.e. enterprises, institutions, etc.) but primarily on units performing the same kind of economic activity. In this connection, if an enterprise or institution, or other organizational unit, carries out more than one type of economic activity, it is considered to consist of two or more establishments, each belonging to its respective sphere and branch.
18. The classification of various activities by socio-economic sectors is based on the particular form of ownership of the fixed and circulating capital of relevant organizational units (state, co-operative, personal and private).
19. The section gives also the general definitions of basic indicators of the System: the global product and the national income.
20. The global product is considered both in its physical tangible composition as a sum of material goods produced by the branches of material production, being either means of production or consumer goods, and in terms of value as a sum of transferred and newly created value materialized in a given mass of material goods.
21. National income is a newly created value and is that part of the global product that remains after deduction of material inputs (capital equipment/materials and supplies).
22. The section gives also general definitions of indicators of the utilization of the global product: the replacement of consumed means of production (intermediate material consumption), consumption in the non-material sphere, net capital formation, the replacement of losses, balance of imports and exports.
23. In the System of Balances of the National Economy, wear (depreciation) of productive fixed assets is considered as an element of the intermediate material consumption and a part of value transferred to the global product. National income in the System is a source of incomes of individual sectors and branches of the national economy, and of the population.
24. Since the System embraces all products made and all incomes generated in the national economy, it can be compiled only in terms of money.
25. The indicators of the System are estimated in current and in comparable prices.
26. The section gives a reflection of the links with foreign countries. The economic links with foreign countries are divided into two groups. The first group embraces the goods turnover in foreign trade, material services and uncompensated aid. The second group embraces export and import of non-material services and transfer payments.

B. The balance of production, consumption and accumulation of the global product (material balance)

27. This section gives a detailed methodology for the compilation of the material balance which covers:

(a) The formation of material resources in the national economy, their distribution and their final uses;

(b) The volume, rate of growth and structure of the production, consumption and accumulation of the global product;

(c) The branch and socio-economic structure of the production and utilization of the global product;

(d) The basic proportions and interrelations arising during the process of production of the global product (between production and consumption, and accumulation, between the output of means of production and of consumer goods);

(e) The volume, structure and growth of personal and collective consumption of material goods.

28. The conceptual frame of the table for the material balance contains a system of the following principal indicators:

(a) Sources of supply of material resources:

(i) The global product produced on the territory of the country;

(ii) Imports;

(iii) Total supplied;

(b) Utilization of material resources:

(i) Intermediate material consumption;

(ii) Consumption in the non-material sphere;

(iii) Net capital formation;

(iv) Replacement of losses;

(v) Exports;

(vi) Total utilized.

29. The modifications in the classification of the branches of the national economy, further development of the methodology of accounting of output of industry, agriculture and construction in kind and in value carried out by the

Commission in recent years within the framework of the improvement of relevant unified branch systems of statistical indicators and the practical experience of the statistical offices of the CMEA member countries accumulated in recent years brought about the necessity for the further clarification and more detailed description of the methodology for the calculation of the global product and of the intermediate material consumption.

30. Modifications were made in the methodology of calculating the gross output of industry, agriculture, forestry, trade, material and technical supplies and procurements and other branches of material production.

31. The methodology of calculating the global product was further improved.

32. An addition was made to the evaluation of material productive inputs.

33. The methodology of accumulation of material goods is given in more detail.

34. The accumulation of material goods in the material balance is shown as a sum of the increase in the value of fixed assets (new fixed assets put into use plus inputs for completed capital repair minus depreciation and net value of liquidated fixed assets) and the increase in stocks.

35. In connection with the clarification of the sources of supply of material goods to the population, more precise description of individual paragraphs is given.

36. Final consumption of the global product in the System of Balances of the National Economy is divided into personal consumption of material goods, the consumption of material goods by institutions and organizations providing cultural services, amenities, and social welfare service to the public, and the consumption of material goods by institutions and organizations in the non-material sphere meeting the collective needs of the community.

37. The section includes the following table of non-material balance:

- (a) The balance of production, consumption and accumulation of the global product (material balance), at final consumers' prices, at producers' prices;
- (b) The balance of production and utilization of the global product;
- (c) The balance of production and utilization of the national income;
- (d) The global product by branches and social sectors;
- (e) Intermediate material consumption, by branches and social sectors;
- (f) National income produced, by branches and social sectors;

- (g) Material consumption in the non-material sphere, by branches and social sectors;
- (h) Personal consumption of material goods, by sources of origin;
- (i) Net fixed capital formation and increase in stocks in the branches of the national economy by social sectors.

C. The balance of production, distribution, redistribution and final disposition of the global product and the national income (the financial balance)

38. As mentioned above, the financial balance studies the income flows: the generation of the primary incomes, redistribution, establishment of final incomes. The primary incomes include the incomes of enterprises of the material sphere and of the population engaged in the production as a result of primary distribution of the national income at the production stage. As a result of redistribution, incomes of enterprises and organizations of the non-material sphere and of population engaged in the non-material sphere are generated. In the process of redistribution there are also transfers of a part of incomes between branches, enterprises, households and foreign countries, according to the development needs of the national economy. The primary distribution of the national income and its partial distribution result in establishing the final incomes of enterprises of the sphere of material production, of enterprises and organizations of the non-material sphere, and of the population disposed directly for consumption, net capital formation, replacement of losses, etc.

39. The indicators of the production and disposition of the global product and the national income in the financial balance correspond to the similar indicators of material balance by branches and social groups, thus showing the structure of reproduction, in terms of value and products.

40. The financial balance shows the primary incomes and final incomes in terms of the amounts accrued. The interrelations of the branches of the national economy and of the population with the financial and credit system are reflected on the basis of actual payments and receipts. The difference between income earned and income received is adjusted by indicators of change of debit and credit balances as one of the forms of redistribution.

41. The following tables are included in the section:

- (a) The balance of production, distribution, redistribution and final disposition of the global product and the national income (the financial balance);
- (b) Interrelations between financial and credit institutions;
- (c) The balance of money income and the expenditure of the population.

D. Input-output table

42. The input-output table is a further development and part of the material balance. It permits a profound and comprehensive analysis of interrelations between all the branches of the national economy, the determination and analysis of the social costs of production, the calculation of input coefficients, branch by branch.

43. The conceptual framework of the input-output table corresponds to the well-known open statistical model. The input-output table has three principal parts (quadrants), each characterizing different aspects of reproduction.

44. The most important part of the input-output table, the inner matrix (quadrant I) characterizes the interindustrial links. It has a form of a square matrix with the same branches in rows and columns. The diagonal elements of the matrix show the intrabranched utilization of output. The composition of the quadrant is determined by the nomenclature of branches adopted in the construction of the input-output table. The section gives the consolidated and detailed nomenclatures of branches.

45. In the consolidated nomenclature, the subdivision of material production is made at the level of branches of the national economy, and by sub-branches within the industry branches.

46. The detailed nomenclature gives the division of branches of material production mainly by kind of economic activity.

47. The side quadrant shows the final utilization of output:

- (a) Expenditure on new fixed capital formation and capital repairs;
- (b) Change in reserves of material working capital (without work under construction);
- (c) Non-material consumption, including personal consumption;
- (d) Losses and other unbalanced items;
- (e) Exports.

48. The lower quadrant shows:

- (a) National income in terms of primary incomes of the population and primary incomes of enterprises;
- (b) Depreciation (shown between quadrant I and quadrant III of the balance);
- (c) Imports (shown by a separate row).

49. Thus, the inner and lower quadrants characterize the inputs into production and reflect, at the same time, the composition of the output of each branch in terms of value.

50. The distribution of output in the national economy, including personal consumption, is shown in rows of the inner and side quadrants.

51. The input-output table, is an entirely new section of the document.

E. The manpower balance

52. The section dealing with the manpower balance has been substantially modified as compared to the United Nations document of 1971.

53. The updated variant of the manpower balance gives the methodology for the compilation of indicators of reproduction of labour force in more detail, and provides the possibility for a better understanding of economic meaning of this important section of the System of Balances of the National Economy and, hence, the possibilities of analysing the phenomena under consideration.

54. In the earlier document, only one aspect of the manpower balance was worked out - the balance of manpower resources. At present, the manpower balance contains the following tables:

- (a) The balance of manpower resources;
- (b) The balance of specialists;
- (c) The balance of skilled cadres;
- (d) The balance of the working time.

55. The conceptual frames of separate parts of the balance consist of two sections:

- (a) Resources: manpower, by sex, skills or resources of the working time;
- (b) Distribution of resources: persons employed (worked out time respectively), pupils and unused resources of persons or of working time.

56. The majority of the tables in the manpower balance are classified as follows:

- (a) Resources: persons of working age fit for work and persons not of working age who are working;
- (b) Persons employed, by branches of the national economy and by forms of property.

57. The manpower balance is organically linked with the remaining sections of the System of Balances of the National Economy and makes it possible to determine some qualitative features of reproduction, and a degree of intensification of production, such as labour productivity, availability of funds, etc.

F. National wealth and the balance of fixed assets

58. This section reflects the improved methodology for the calculation of the indicators of national wealth.

59. Unlike the indicators of other sections of the System of Balances of the National Economy which are calculated by a territorial principle, it is recommended to calculate the indicators of the national wealth by the national principle also. The new composition of the table of balance of the national wealth provides the possibility for calculating the total of wealth in these two variants.

60. Valuation of various components of the national wealth, and a system of prices used in the calculations are given in more detail.

61. A unified nomenclature of durable goods, by product groups in retail trade turnover, has been worked out to calculate the stockpiles of material consumer goods in the households of the population.

62. The calculation of the stockpiles of durable goods according to the statistical data of retail trade turnover taking into account the average service life, by product groups, is considered to be the most commonly used method.

63. The national wealth is the aggregate of accumulated material goods created by labour, reserves of foreign currency and foreign credit balances (net) available to the community at a given time. Taking this into account and owing to practical considerations the calculated composition of the national wealth is limited only by the reproduced material resources, and also by reserves of foreign currency and foreign credit balances. Natural resources are not included in the value composition of the national wealth.

64. The indicators of the national wealth in the System characterize its size and its material structure in physical terms at the beginning and at the end of the year.

65. The material goods accumulated by the community are divided into:

- (a) Fixed assets (productive and non-productive);
- (b) Working capital in the sphere of material production, stocks and reserves;
- (c) Material stocks and reserves in the non-material sphere;
- (d) Material consumer goods in the households of the population.

66. The most important part of the national wealth are fixed assets described in the balance of fixed assets at full value and at original cost less depreciation.

G. The indicators of population incomes and consumption

67. This section is a new one in the basic methodological provisions for the compilation of the System of Statistical Balances of the National Economy; its purpose is to give a more comprehensive system of analysis of the living standard of the population.

68. It is recommended to calculate two basic indicators of population incomes: the income utilized and total income. The income utilized is considered as a part of national income, that is, as a definite portion of material goods received by the population as a result of its final distribution.

69. The income utilized embraces the receipts in money and in kind received by the population as a payment for their labour; receipts in money from the social funds for consumption less incomes which were not utilized for the acquisition of material goods (compulsory payments and voluntary contributions, payments for non-material services, increase in savings). Moreover, the income utilized includes the cost of material goods consumed by institutions providing cultural services, amenities and social welfare services to the public.

70. The total income of the population embraces incomes utilized which are part of the national income, and also the non-material part of services of non-material nature rendered to the population, and the increase in savings.

71. In order to show a true picture of population incomes in the System correlated with other indicators, a detailed description is given in this section of the division between the population incomes and the intermediate material consumption, and between the collective consumption by the community as a whole.

72. The population incomes do not include: the cost of special clothes and shoes used exclusively during working time; food, beverages, soap, etc. served to the workers in order to protect the organism against the harmful influence of production; operating costs for the upkeep of cloak-rooms and showers at working places, etc. These are included in the material costs of production.

73. The population incomes are classified by forms of receipt: in money and in kind; by sources of receipt; by nature of income disposition.

74. The total income of the population is correlated on the whole with the total consumption by the population.

75. The total consumption by the population, as distinct from the consumption by the population in the material balance, includes both the consumption of material goods and the total cost of services of a non-material nature - material outlays and wear and tear of assets in the non-material sphere, as well as non-material

components of service costs (wage and salary, profits, allocations for social welfare, etc.).

76. The indicators of the consumption by the population (consumption of material goods and total consumption) embrace equally consumption on account from the incomes in money and in kind including the consumption of own output, and also that part of service costs which is met on account from the state budget, from the funds of enterprises and of co-operatives (the so-called gratis consumption).

77. In the practice of calculations, while estimating the value of material goods and of the non-material services, the elements of consumption by the population should be separated from:

- (a) The intermediate material consumption;
- (b) The net capital formation;
- (c) Other kinds of non-material consumption;
- (d) The redistributive payments.

78. In addition to the consumption indicators in value terms, the System of Balances of the National Economy envisages the indicators of consumption of goods in natural units of measurement.

H. The balance of non-material services

79. This section is a new one in the basic methodological provisions for the compilation of the System of Statistical Balances of the National Economy.

80. The balance of non-material services studies the resources and the utilization of non-material services. The non-material services are classified by branches of the non-material sphere on the basis of a detailed classification of non-material services given in this section.

81. The indicators of utilization of non-material services in the balance table are given in accordance with the actual place of their consumption: in the sphere of material production, in the non-productive sphere, by the population, by the community as a whole and in the foreign countries.

82. Moreover, the consumption of non-material services by the population is shown as paid for, and as free of charge.

83. The system of balances to characterize the economy of the non-material sphere includes the following tables:

- (a) The balance of resources and of utilization of non-material services;

(b) Cost of paid non-material services, by cost elements (by self-supporting enterprises);

(c) Cost of non-material services, by cost elements (by budget and similar organizations);

(d) The balance of incomes and expenditures of the units of non-material sphere.

84. The section also contains a system of indicators of exports and imports of non-material sphere.

85. The exports and imports of non-material services are regarded as an activity resulting in foreign currency earnings and expenditures related to the provision and receipt of various non-material services between the countries.

86. As a rule, the non-material services in the economic relations with foreign countries are taken into account by the moment of compilation of invoice, payment document, and other payments by the moment of payment.

III. APPENDICES TO THE DRAFT

A. Classification of branches of the national economy of the CMEA member countries

87. The classification of branches of the national economy of the CMEA member countries holds central place within the system of social and economic classifications and nomenclatures because it is one of the major instruments for studying and characterizing the social division of labour, structure, structural shifts and trends in the development of the national economy.

88. It is a classification of homogeneous kinds of activity, by branches of the national economy. The classification is made in such a way so as to make a distinction between two spheres of activity: the sphere of material production and the non-material sphere.

89. This classification aggregates the kinds of social and economic activity of 16 branches, including:

Sphere of material production

01. Industry.
02. Construction.
03. Agriculture.
04. Forestry.
05. Transport.
06. Communications.
07. Trade, logistics and procurements.
08. Other branches of the sphere of material production.

Non-material sphere

09. Housing, public utilities and amenities.
10. Science.
11. Education.
12. Culture and art.
13. Health care, social welfare, physical culture and tourism.
14. Finance, credit, insurance.
15. Management.
16. Other branches of the non-material sphere.

B. System of indicators of social statistics

90. An important addition to the statistical balance of the national economy is the system of indicators of social statistics. Social groups used in the System of Balances of the National Economy make it possible to study the pattern of public relations governing particular forms of organization of production, exchange, consumption and accumulation. To provide for an integrated analysis of social processes, and for a description of various aspects of life of the population in more detail, the draft basic methodological provisions for the compilation of the System of Statistical Balances of the National Economy has been supplemented by the system of indicators of social statistics worked out recently by the CMEA Standing Commission on Co-operation in the Field of Statistics. The system of indicators of social statistics provides for the study and statistical reflection of the following living conditions of the community:

- (a) Population and family;
- (b) Education;
- (c) Manpower and employment;
- (d) Social composition of the community;
- (e) Distribution of incomes and of property of the population;
- (f) Consumption;
- (g) Health;
- (h) Housing;
- (i) Activity in the field of culture;
- (j) Physical culture, tourism, recreation;
- (k) Time budget of population;
- (l) Social welfare;
- (m) Development of public utilities and amenities;

- (n) Environmental protection;
- (o) Labour conditions;
- (p) Participation of population in the public and political life;
- (q) Social pathology.

91. The system of indicators of social statistics is included in the updated document on the System of Balances of the National Economy as an appendix, together with the classification of branches of the national economy.

IV. CONCLUSION

92. The draft basic methodological provisions for the compilation of the System of Statistical Balances of the National Economy, as noted above, is a result of generalization of theoretical and practical experience of the CMEA member countries by the CMEA Standing Commission on Co-operation in the Field of Statistics on the systematization and analysis of the indicators of the national economy which characterize a complicated and multi-faceted process of social reproduction.

93. The draft reflects, in a general form, the basic principles of the compilation of the system of statistical balances of the national economy unified within the framework of the CMEA Standing Commission. It should be noted that the practical elaboration of the System of Balances of the National Economy in the CMEA member countries is not limited by the basic principles mentioned in the draft but is developed and made more concrete, account being taken of real needs for the analysis of the social and economic development of each country. That is why the CMEA Standing Commission continues to improve the agreed methodology of the System of Statistical Balances of the National Economy and, inter alia, it is engaged now in examining the possibility of updating the indicators of the financial balance and the balance of national wealth.

94. The significance of the new draft basic methodological provisions for the compilation of the System of Statistical Balances of the National Economy is that this document, worked out with due account taken of the progress achieved, above all in the field of methodology of the compilation of the material balance on the basis of the updated classification of branches of the national economy of the CMEA member countries, which reflected new developments in the elaboration of indicators characterizing the reproduction of non-material services, now reflects comprehensively basic principles of statistical balances of the national economy.

95. Its significance is in providing better possibilities at the present stage for international comparisons of major indicators of the national economies, including countries which use a system of national accounts for studying social reproduction.

Notes

- 1/ United Nations publication, Sales No. E.71.XVII.10.
